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1 RECORD OF ORAL HEARING
2 UNITED STATES PATENT AND TRADEMARK OFFICE

3 _____
4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES

6 _____
7 *Ex Parte* YAKAYUKI TSUTSUMI and YOSHIKAZU KOBAYASHI

8 _____
9 Appeal 2010-001564
10 Application 10/648,277
11 Technology Center 2400

12 _____
13 Oral Hearing Held: February 3, 2011

14 _____
15 Before MAHSHID D. SAADAT, MARC S. HOFF, and BRADLEY W.
16 BAUMEISTER, *Administrative Patent Judges*.

17 APPEARANCES:

18 ON BEHALF OF THE APPELLANT:

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2 The above-entitled matter came on for hearing on Thursday,
3 February 3, 2011, commencing at 10:16 a.m., at the U.S. Patent and
4 Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Deborah
5 Courville, a Notary Public.

6 PROCEEDINGS

7 THE USHER: Calendar Number 18, Appeal Number 2010-1564,
8 Mr. Barr.

9 JUDGE SAADAT: Thank you.

10 Mr. Barr, either spell your full name or provide a business card for the
11 reporter for the spelling.

12 MR. BARR: Okay. My full name is Eric Barr, E-r-i-c, last name
13 Barr, B-a-r-r.

14 JUDGE SAADAT: Thank you.

15 MR. BARR: That card is fine. Thank you.

16 JUDGE SAADAT: Please start whenever you're ready.

17 MR. BARR: Good morning, Your Honors. My name is Eric Barr and
18 I'm with Sughrue Mion and I'm here on behalf of NEC Corporation.

19 At issue in this case is a rejection under Section 102, and I would like
20 to discuss that rejection with respect to Independent Claim 1. And in
21 particular, there are two features in Claim 1 I'd like to discuss today, and
22 those features are an access point search unit for searching for peripheral
23 connectable access points and for obtaining access point data and, skipping
24 forward in the claim, an access point data table in which the access point
25 data detected and obtained by the access point search unit are recorded.
26

1 The Examiner asserts that the *Takayama* reference discloses these
2 features and, specifically, the *Takayama* reference discusses in paragraph 77
3 the station downloads the hopping information of the neighboring access
4 points saved in the subscription access point. So in *Takayama*, there is a
5 mobile station which is downloading access point data from the access point
6 it's currently connected to, and the Examiner is asserting that that is the
7 same as these claim features of an access point search unit for searching for
8 peripheral connectable access points.

9 The important distinction that I'd like to point out is that our claim
10 requires that these are features of the mobile terminal. In other words, it's
11 the mobile terminal which does the searching for peripheral connectable
12 access points. That's very different from the *Takayama* reference in which
13 the station, which the Examiner is asserting is the mobile terminal, it's not
14 actually searching for these peripheral connectable access points itself, it's
15 merely downloading this information from the connected access point, and
16 we would submit that that's a very different thing than this claim feature of
17 searching for peripheral connectable access points.

18 JUDGE SAADAT: Are you saying it's a passive download?
19 Whatever gets sent to it, it downloads it?

20 MR. BARR: Correct. In the *Takayama* reference, it's actually the
21 access point itself which obtains information about other access points, and
22 the access point itself, according to *Takayama*, saves that information in a
23 database and that information can then be downloaded to the mobile
24 terminal, according to *Takayama*.

25 JUDGE BAUMEISETER: Well, if *Takayama* has a mobile terminal
26 that is doing the downloading, why can't that be saying it is searching the

1 parent AP for the information about the peripheral APs? If I go and I buy --
2 go to the grocery store to get my meat, I am searching for the meat even
3 though the grocery store has already, you know, got -- received it from the
4 butcher, who found it from the farm or the ranch, and isn't that still
5 searching?

6 MR. BARR: I appreciate your analogy, but we would submit that no
7 searching is performed because all of the information is coming from one
8 location. All of the information is coming from the subscription access
9 point. It's not being collected -- the mobile terminal is not individually
10 collecting the information from the different peripheral connectable access
11 points.

12 JUDGE HOFF: Does your specification support that position?

13 MR. BARR: It's probably helpful. I can point to a few places in the
14 specification that clarify this issue somewhat. If I could please direct your
15 attention to page 3 of the specification. This is in the section talking about
16 the background of the invention, and in the background section, a
17 conventional system is described which is actually quite analogous to the
18 system in *Takayama*. And the specification says that, referring to this
19 conventional system, a Parent Station AP102A to which a station, a Mobile
20 Terminal 101, is connected fetches over a Land 5 hopping data for APs
21 102B and 102C and stores these data. So the -- in other words, the parent
22 station is obtaining this hopping information from other access points.

23 Similarly, the other APs connected to the Land 5 also fetch the
24 hopping data for the other APs over the Land 5 and store these data.
25 Therefore, the Mobile Terminal 101 can download from the connected
26 Parent Station AP 102A the hopping data for the peripheral APs 102B and

1 102C. That is based on the hopping data for the peripheral APs 102B and
2 102C, which are obtained from the parent station AP 102A. The mobile
3 terminal can store the latest wireless communication states to the peripheral
4 APs in a database. So this paragraph right here is very similar to what
5 *Takayama* is disclosing where the APs themselves obtain this hopping
6 information from other APs, and then the mobile terminal is able to
7 download it.

8 JUDGE HOFF: Taking that as true, what we are struggling with is
9 interpreting the word searching in the claim. And you've got support in the
10 spec for the way that you are suggesting that we should interpret it. We'd
11 appreciate you pointing us to that.

12 JUDGE BAUMEISETER: That portion of the spec distinguishes
13 download from fetch, but that doesn't address the question of distinguishing
14 download from search.

15 MR. BARR: Give me just a moment, please, as I'm turning to the
16 claim. I think that the terms that I think are helpful to focus on -- the feature
17 describes -- I'm sorry, the claim describes an access point data table in
18 which the access point data detected and obtained by the access point search
19 unit are recorded. I think those words, detected and obtained, are key words
20 that would preclude reading the claim on the downloading of information,
21 such as in the *Takayama* reference. When you're downloading information
22 from the connected access point, I would not consider it fair to say that the
23 mobile terminal is detecting that information. The information, instead, is
24 being detected by the access point and merely transmitted or downloaded to
25 the mobile terminal. So, I think, because of the word detected and obtained,
26 I think the claim does not read on the *Takayama* reference.

1 JUDGE SAADAT: Just to be complete, what specific steps or parts
2 of this search unit provides that detection?

3 MR. BARR: I'm -- apologize. I'm not sure if I fully understand your
4 question.

5 JUDGE SAADAT: The claim limitation calls for an access point
6 search unit and it searches and obtains.

7 MR. BARR: Correct.

8 JUDGE SAADAT: What part of the unit does the searching? What
9 part of it does detect -- the obtaining?

10 MR. BARR: What part of the access point search unit does the
11 detecting, is that correct?

12 JUDGE SAADAT: In comparison to searching.

13 MR. BARR: On page 13 of the specification, starting at line 7, the
14 access point search unit is described as performing active scanning -- an
15 active scanning process and a passive scanning process that are defined by
16 the IEEE802.11 specifications, and it receives access point data from the
17 Receive Data Identification Unit 12 and it updates the data in the Access
18 Point Data Table 151. So it has a search unit which performs both active
19 and passive scanning processes and it uses those processes to obtain the data
20 which is then stored in the access point data table.

21 JUDGE SAADAT: Okay. Thank you.

22 MR. BARR: The specification also goes on to talk about some of the
23 significance between the differences that we -- between the system in
24 *Takayama*, for example, these conventional type systems, and the claimed
25 system. And according to the specification, on page 4, starting around line
26 22, it talks about in the conventional fast roaming system where the

1 information is downloaded from the -- hopping information is downloaded
2 from the connected access point, the information is only periodically fetched
3 by the mobile terminal and the information that's fetched is therefore not
4 always current. So sometimes the database contents are stale and they don't
5 represent the current state of the network. So that's one of the disadvantages
6 of the more conventional systems, which we would submit *Takayama* is one
7 of those types of systems.

8 On page 6 of the specification, starting around line 7, the specification
9 talks about how in the exemplary embodiments of the claimed invention, the
10 mobile terminal is able to access the peripheral connectable access points
11 and it can then obtain the latest information -- the latest data by directly
12 contacting those points, and that data that's obtained are then stored in the
13 database and this allows for more up-to-date information to be maintained at
14 all times rather than only periodically fetching it or downloading it from the
15 connected access point.

16 There's also another issue that the Examiner has raised relating to a
17 scanning operation which is disclosed in the *Takayama* reference, and the
18 Examiner has asserted that information obtained in the scanning operation
19 which is performed by the mobile terminal can be stored in the database, and
20 the Examiner is interpreting this to be the same as the claim feature. We
21 would respectfully submit that's not the case.

22 In *Takayama*, if I could first, please, direct your attention to Figure 8.
23 Figure 8 shows that if the hopping information of the neighboring access
24 points has not been obtained -- this is step 81 -- has not been obtained from
25 the connected access point, in that situation the mobile terminal will scan --
26 will perform a scanning operation itself to search for other connectable

1 access points. But if you follow the flow of this chart, you'll see that in that
2 case step 82 is skipped. In other words, the database only comes into play in
3 *Takayama* when that information has already been downloaded from the
4 connected access point. So the scanning operation is only performed when
5 that database doesn't exist where that information has not been downloaded
6 from the access point, and in that case there is no database which is created.
7 That information is not stored in a database. *Takayama* describes these
8 operations in a greater level of detail in paragraphs 77 through 83.

9 In paragraph 77 of *Takayama*, the reference talks about the mobile
10 station downloading hopping information of the neighboring access points
11 saved in the subscription access point. That's the currently connected access
12 point. The station can get the hopping information of up to four access
13 points being provided around the current subscription access point by the
14 downloading. Skipping down to paragraph 81, if it's determined that the
15 hopping information has been downloaded -- and I'm paraphrasing -- the
16 CPU is able to monitor beacons from these neighboring access points to
17 determine the radio situation, and then they can -- and can fit the hopping
18 channel in the hopping pattern to the neighboring access point having the
19 best communication environment via the wireless mat controller.

20 So in this case, the hopping information of neighboring access points
21 has been downloaded from the subscription access point. The only
22 operations performed by the mobile station involve listening to these
23 beacons and determining which access point -- determining the radio
24 situation of the access points by listening to these beacons. There's no
25 process of detecting access points and there's no process of saving
26 information in a database that's detected by the mobile station. The

1 information that's saved in the database is that information which is
2 downloaded from the subscription access point.

3 Paragraph 83 talks about the case when the hopping information has
4 not been downloaded. In this case, the CPU of the mobile station scans for
5 other access points, but in this case, as we saw in Figure 8, that database is
6 not used. It doesn't come into play. And to be a little more specific, I noted
7 in paragraph 81 that when that information has been downloaded from the
8 subscription access point the mobile station merely needs to listen for
9 beacons to determine the radio situation. We would submit that in this
10 *Takayama* reference those beacons are not stored in the database and,
11 therefore, that is -- the only information stored in the database is the
12 information obtained from the subscription access point.

13 And the last point I'd like to reiterate is the claim, as I noted, requires
14 that the access point search unit detects and obtains the access point data,
15 and we would submit that a person of ordinary skill in the art would
16 understand that searching for access point data stored in memory or
17 retrieving it from a connected access point is not the same as detecting and
18 obtaining access point data as required by the claim.

19 For these reasons, Your Honors, we would submit that Independent
20 Claim 1 is patentable over the *Takayama* reference. Claim 15, I would note,
21 requires features which are similar to the features recited in Claim 1 and,
22 thus, we would submit that Claim 15 is also patentable for these reasons. I
23 would be happy to answer any questions you may have.

24 JUDGE SAADAT: Thank you.

25 Do you have any questions?

26 JUDGE HOFF: No.

1 JUDGE BAUMEISETER: No.

2 JUDGE SAADAT: No more questions. Thank you.

3 MR. BARR: Thank you very much.

4 (Whereupon, the proceedings, at 10:37 a .m., were concluded.)

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